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## Current Considerations of Counter Terrorism in the Risk Management Profession

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### ABSTRACT

The impact of terrorist attacks extends far beyond the immediate victims and can affect the wider economic environment including strategically important sectors of the economy. Mitigation of the adverse effects of such attacks should be of interest to risk management professionals, however, a gap within the literature has been identified with respect to risk managers. This article drawing upon primary research conducted with risk managers explores their current considerations toward counter terrorism. In doing so, the article examines the perceived responsibilities and competencies of risk managers and the subsequent challenges posed with respect to managing and mitigating the terrorism risk.

### KEYWORDS

Risk management; terrorism risk; risk managers; risk mitigation

## Introduction

Terrorist attacks have increased in significance in recent times and have evolved from disruptive attacks on critical infrastructure assets toward spontaneous (or no-notice), low sophistication and high impact attacks on crowded places. The most significant of these attacks, in a western context, have occurred in mainland Europe, and in more recent times, the United Kingdom. A shift in attack methodologies can be observed, away from vehicle-borne improvised explosive devices such as those used by the Provisional Irish Republican Army (PIRA) between 1969 and 1998, toward vehicle-borne methods (Barcelona, 2017; London, 2017; Berlin, 2016; Nice 2016), marauding terrorist firearms attacks (Paris, 2015), and person-borne improvised explosive devices (Manchester, 2017; Brussels, 2016; Paris, 2015). In parallel to this change in attack typology, we have also witnessed a shift away from attacks where warnings were given such as those carried out by the PIRA, toward no-notice/warning, and often no intelligence,

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attacks, which has added greater complexity to government-led counter terrorism strategies and initiatives. As a consequence of the spontaneity (target and timing) and lack of intelligence signals, no matter how weak they are, countering the threat, risk, and harm of terrorism, has become a whole-of-society problem, requiring a whole-of-society approach.

In the United States, the prevalence of terrorism is also evident with the events of 9/11 and the bombing of the Alfred P. Murrah Federal Building in Oklahoma City in 1995, highlighting the devastating reality of the impact of such attacks. In more recent times, and in a similar vein to that of the European examples, crowded places have featured highly as the main location of attacks for those aligned with both international- and domestic-related terrorism. Events, such as the 2009 Fort Hood shootings, the Boston Marathon bombing in 2013, the mass shooting and attempted bombing in San Bernardino in 2015, the Orlando nightclub attack in 2016, and the 2017 attack at Fort Lauderdale Airport, have illustrated, that the terrorist threat, is still prevalent in a U.S. context.

While such attacks, and those which have preceded, have posed significant challenges for government, law enforcement and other agencies tasked with preventing terrorist events, they are also fundamental concerns for those mitigating risk across all business sectors. These acts of terrorism have resulted in substantial loss of life, property damage, financial loss, reputational harm and the breaking down of societal relations, which in turn, has impacted on the attractiveness of cities for economic activities such as tourism. In the context of loss of life, recent events in Europe have resulted in substantial fatalities, with 130 people killed in the November 2015 attacks in Paris, 35 deaths in the coordinated attacks on the Brussels public transportation infrastructure in 2016, 86 as a consequence of the vehicle-borne attack in Nice in 2016, 12 at a Berlin Christmas market, 23 in the attack at the Manchester Evening Arena in 2017, 14 in Barcelona and Cambrils in 2017, and seven during the vehicle-borne and knife attack on London Bridge and Borough Market in June 2017. In the American context, nearly 3,000 people died as a result of the multiple attacks on 9/11, 168 in the Oklahoma City bombing, 16 in the attack in San Bernardino, and 50 people as a result of the Orlando nightclub attack.

Property damage and financial loss are also impacts that are particularly prevalent, both as motivations behind terrorism, and as a consequence of an attack. In 1992, PIRA detonated a large truck bomb at the Baltic Exchange, London, resulting in over £800 million (approximately \$1,064 million) in damages, it was estimated that this one attack cost £200 million (approximately \$266 million) more than the 10,000 explosions aligned with Northern Ireland related terrorism prior to this (CAIN, 2017). In 1993, PIRA utilized another truck bomb in the Bishopsgate area of the City of

London resulting in damages between £1 billion (approximately \$1.33 billion) and £2 billion (Cole, Watters, & Lynch, 2011). An audit carried out on behalf of the State of Oklahoma estimated that the cost of the Alfred P. Murrah Federal Building bombing and the associated damage of 300 other buildings in proximity to the detonation site, was approximately \$652 million. (KPMG Peat Marwick LLP, Adjusters International Inc., & Barrett Consulting Group, 1995) In contrast, the impact of 9/11 in the context of damages was substantially higher and saw considerable costs across a number of different sectors. In relation to the insurance sector, the effects of 9/11 resulted in the largest property/casualty claim in U.S. history, estimated at \$40 billion (Makinen, 2002). Whilst the extremity of 9/11 was an isolated phenomenon, and the insurance industry had the liquidity to settle these claims, more frequent attacks may result in significant challenges for the wider industry (Makinen, 2002). Small businesses were also adversely impacted, with nearly 18,000 either dislocated, disrupted or destroyed by 9/11 (Makinen, 2002).

Other sectors, such as tourism, have also realized the impact of terrorism, albeit at varying degrees. The firearms attack in Sousse, Tunisia, in 2015, resulted in 39 deaths—most of which were British tourists. After the attack, tourism in the region fell 60% resulting in major losses for an economy where tourism accounted for 8% of the gross domestic product and 470,000 jobs in 2014 (World Travel & Tourism Council, 2015). This poses significant questions on how such losses could be mitigated going forward, and the need to protect the wider economic environment from the impact of attacks on sectors that are strategically important to the economy.

Given the significance of the impacts that can be experienced from acts of terrorism, it is essential that risk managers consider terrorism within their risk management process. The extant literature base is limited in its content in this important area with a lack of evidence concerning current considerations of risk managers toward counter terrorism. With the rising significance of terrorist attacks and their associated impact we need to understand more about the response of risk management professionals to this phenomenon. We need to know more about what they consider of most importance to their role in the context of business risk and exposure and how mitigation can be enhanced in order to better protect and prepare their client businesses and the businesses respective communities with regards potential terrorist actions. This research is designed to provide an understanding of those considerations, including how risk management could be improved in the future in relation to terrorism.

The second section of this research presents the review of the literature relating to risk management and terrorism. The third section is concerned with the methodological framework that was used to conduct the empirical

stages of the study, with the fourth section and the fifth section presenting and analyzing the results and strategic recommendations of the research. The sixth section illustrates the conclusions.

## **Literature review**

### ***Risk management***

The defining of risk management is well established in the extant literature base, with significant scholarly attention paid to the concept of what risk management entails, and the risks that are posed, although disparity exists across the business sector landscape and by academic and practitioner sources (Aven, 2012; Hopkin, 2017; Rejda & McNamara, 2017). Despite this, there is no commonly agreed definition for risk management across business sectors, risk typologies, or jurisdictions. In general terms, risk management has been defined as a mechanism that establishes loss exposure by businesses and identifies and implements the most appropriate methods for countering and mitigating such exposure (Rejda & McNamara, 2017). Loss exposure is considered as any scenario in which a loss is possible, even if a loss does not actually occur. This has evolved significantly as risk managers in the past were only mindful of actual loss exposures by the business, whereas contemporary risk management also considers speculative losses (Rejda & McNamara, 2017). While there is ambiguity in the context of an agreed definition, there is general consensus on the core stages and functions of risk management. There is agreement that the initial stage of risk management centers on the identification of all risks that may derive major or minor loss exposures (Falkner & Hiebl, 2015; Leung, Lambert, & Mosenthal, 2004; Rejda & McNamara, 2017). Once these loss exposures are identified, there is a fundamental need to measure and quantify these by estimating the potential frequency and severity of the losses that may be incurred, and then prioritizing these losses based on their importance to normal business operations (Leung et al., 2004; Rejda & McNamara, 2017; Wang, Dulaimi, & Aguria, 2004). Proceeding this, is the identification and adoption of the most proportionate and suitable measures for countering and mitigating loss exposure. The final stage of risk management is that of control, financing, and monitoring which is designed to reduce the frequency and severity of the losses as well as the mechanisms for funding the losses (Rejda & McNamara, 2017; Tummala & Schoenherr, 2011; Wang et al., 2004).

### ***Risk management and terrorism***

Within the extensive body of literature on terrorism, considerations relating to risk and risk management have a lengthy pedigree especially in relation

to urban terrorism (see Coaffee, 2009; Compton, Murray, & Osborne, 1980; Haynes, 1995). As Coaffee (2009, p. 6) notes “increasingly, the potential threat of urban terrorism in certain cities has necessitated attempts to ‘design out terrorism’ (or perhaps more correctly to ‘design-in’ counter-terrorism) through the addition of advanced security design features.” Examples would include Belfast and London’s “ring of steel.” Recent research by Perry, Apel, Newman, and Clarke (2017) found that the erection of the Israeli West Bank Barrier and its related security activities, not only reduced suicide bombings and fatalities but did so without displacing them to other locations. Likewise, the managing of risk at airports from terrorists such as increasing security both inside airport terminals (landside and airside) and at drop-off/pick-up locations has not only prevented airliner hijackings but also other kinds of aviation attacks (Hsu & Apel, 2015; Hsu & McDowall, 2017; Shafieezadeh, Cha, & Ellingwood, 2015).

In addition, to the introduction of situational crime prevention measures outlined previously, other mechanisms including legal measures and law enforcement initiatives have also been developed with respect to risk management and terrorism. Examples of such measures would include detention without trial (e.g., internment in Northern Ireland) and the use of emergency or terrorism legislation. Ajzenstadt and Barak (2008, p. 368) examine such measures in Israel and conclude that policy makers “look for ways in which the risks terrorism imposes can be managed, rather than completely eliminated.” In doing so, such policies have the potential to result in the classification of entire groups within society as “risky others” and/or create a suspect community (Hillyard, 1983; Hickman, Thomas, Silvestri, & Nickels, 2011). There is also an acknowledgement that the threat may not come from “outsiders” with more recent research exploring the insider threat and the potential risk posed by such individuals (see, e.g., BaMaung, McIlhatton, MacDonald, & Beattie, 2018) and that it is “difficult to completely mitigate the risk of terrorism” (Lambrechts & Blomquist, 2017, p. 1332).

Thus, within the terrorism studies literature, significant scholarly attention has been paid to the risk management discipline and the importance of managing such risks. This is evident through the diversity and volume of research that has been conducted to date, however, a gap within the literature was identified with respect to risk management professionals.

## Data and methods

The research is designed to provide an informative understanding of the current considerations of risk managers toward terrorism and future potential mitigation that could be developed and implemented across the sector.

As such, there was a need to develop these understandings through questions that mapped back against the gaps identified in the literature and which enabled us to address these gaps through the responses achieved. The gaps realized included a distinct lack of knowledge pertaining to whether terrorism was a core consideration in risk management; impact of the terrorist threat landscape on risk management; considerations toward loss exposure and mitigation; what would better enable risk managers to consider terrorism in their future decision making; as well as the demographic composition of the risk management industry as a controlling mechanism. As a consequence, the question set developed corresponded directly with these themes.

As the research directly related to the risk management profession, risk managers were identified and validated as a consequence of their job title using a business- and employment-oriented social networking service. This allowed us to identify risk managers efficiently, as well as disregarding those that were not relevant for the purposes of this research, such as those outside our defined study area. The study area selection was the State of Oklahoma and was based on the large critical infrastructure network present; a significant portfolio of crowded places across all sectors; and the experiences of terrorism in the past. These criteria were utilized as a consequence of the current threat environment and to understand whether areas that experienced significant terrorist events in the past in the United States, were more conscious of the threat, risk, and harm of terrorism in their decision making.

Data was collected through an online surveying tool which enabled us to reach a greater number of individuals than what a one-to-one interview would have enabled in a more efficient manner. In total, 527 risk managers were identified with 167 responses received, evidencing a 32% response rate, and consistent with past research conducted on likely response rates for online survey data collection (Nulty, 2008). Data responses were analyzed using the identified themes discussed previously.

## Findings and discussion

Understanding the considerations of counter terrorism within the risk management profession is fundamental for ensuring that the methods and training that the profession employs, counters and mitigates the impact of terrorism in businesses, crowded places, and on our critical infrastructures in an effective manner. In trying to develop these understandings, the research sought to identify responses across a number of different themes related to *Professional and Demographic Profiles* of the risk management profession, *Concerns and Considerations of Terrorism* within risk



management, *Responsibilities and Competencies of Risk Management Professional*. The utilization of these themes is to ensure that the recommendations for managing and mitigating terrorism loss exposure through risk management is based on an evidence base that captures the current considerations and approaches of a fundamental business discipline in protecting people, property, and businesses.

### **Professional and demographic profile**

The gender profile of respondents demonstrated an imbalance where only 21.6% were female. This however, is not an unexpected phenomenon with similar trends found within past research carried out by the risk management industry with results ranging from 18% up to 65% depending on the role and seniority of the role of those surveyed (Risk & Insurance Management Society, 2013). Demographic analysis showed that the majority of respondents were over 50 years of age (56%) with the age category, 50–59, accounting for 43% of the total responses. Only 17% were aged between 20 and 39 and 2% identified themselves as falling in to the 20–29 age cohort suggesting a potential challenge for the profession in future years. Table 1 and Table 2 highlight the demographic profile across the study sample.

In order to understand the maturity of the profession in the study area, the length of experience in risk management roles was also surveyed and demonstrated disparity across the different bands utilized. From Table 3, it is apparent that the majority of respondents reported that they had worked in risk management roles for 21–30 years (28.74%), with a large percentage (25.75%) having 31–40 years' experience. People having over 41 years' experience accounted for 5.99% of responses, with experience in the 0–10

**Table 1.** Demographic profile of respondents by gender.

Gender	Number of respondents	Percentage
Female	36	21.6
Male	131	78.4
Total	167	100

**Table 2.** Age profile of respondents.

Age Range	Total
20–29	4
30–39	31
40–49	40
50–59	65
60–69	23
70+	4
Total	167



**Table 3.** Years of experience in risk management roles (%).

Years of experience in risk management	Total
0–10	17.96
11–20	21.56
21–30	28.74
31–40	25.75
41–50	5.39
50+	0.60
Total	100.00

**Table 4.** Levels of concern by gender.

Gender	Concerned	Extremely concerned	Not concerned	Slightly concerned	Total
Female	8.38	2.40	4.19	6.59	21.56
Male	17.96	4.79	17.96	37.72	78.44
Total	26.35	7.19	22.16	44.31	100.00

years' category comprising 17.96% of the sample, which is likely to be highly correlated with the age profile discussed previously.

In relation to the risk management role that respondents operate in, the majority (35%) work in areas related to property and casualty, with only 6% stipulating that their role aligned with risk management in life and health categories. Indeed, 31% worked in both property and casualty, and life and health roles respectively, and 28% indicated that they worked in other areas of risk management such as business continuity, information and cyber security, as well as financial services.

### **Concerns and considerations of terrorism**

The analysis found in Table 4 highlights that the vast majority of respondents (77.85%) stated that they had concerns about terrorist events occurring and impacting upon them, albeit at various levels. It was found that 7.19% were extremely concerned about terrorism in relation to their organization and/or assets that they manage; 26.35% identified themselves as being concerned, with the majority (44.31%) demonstrating that they were only slightly concerned about terrorist events impacting them. Whilst the majority of those surveyed highlighted that they had some level of concern of terrorism, around 22.16% stated that they were not concerned at all, although the reasoning behind this varied significantly with factors such as geography in relation to the recent attacks and the composition of their asset portfolio emerging in their rationale. A Pearson Chi Square test was also conducted to understand if there was significance in relation to gender and the levels of concerns expressed by the respondents. From this analysis, a result of 5.836 was obtained at three degrees of freedom, with a p value of 0.05. This highlights that there is no significance between gender and levels of concern.

**Table 5.** Levels of concern by age profile.

Age range	Concerned	Extremely concerned	Not concerned	Slightly concerned	Total
20–29	1.20	0.00	1.20	0.00	2.40
30–39	5.39	0.60	6.59	5.99	18.56
40–49	5.39	1.80	3.59	13.17	23.95
50–59	7.78	4.19	8.98	17.96	38.92
60–69	5.39	0.00	1.80	6.59	13.77
70+	1.20	0.60	0.00	0.60	2.40
Total	26.35	7.19	22.16	44.31	100.00

**Table 6.** Impact of recent events and gender.

Gender	No	Yes	Total
Female	14.37	7.19	21.56
Male	50.90	27.54	78.44
Total	65.27	34.73	100.00

**Table 7.** Impact of recent events by age profile.

Age range	No	Yes	Total
20–29	1.20	1.20	2.40
30–39	11.98	6.59	18.56
40–49	16.17	7.78	23.95
50–59	26.95	11.98	38.92
60–69	7.78	5.99	13.77
70+	1.20	1.20	2.40
Total	65.27	34.73	100.00

Despite a significant proportion of responses indicating that they have personal and institutional concerns about terrorist events impacting them, 68% responded that their concerns did not evolve as a consequence of recent high profile terrorist events. Instead, much of the narrative provided, suggests that they were already concerned prior to recent attacks, and these events have only further confirmed their original views. Indeed, there was no significance between gender and age profile in the context of responses related to the impact that high profile attacks have had on decision making. In this case, Chi-square values of 0.04 (1 degrees of freedom) for gender significance, and 2.14 (5 degrees of freedom), and both with 95% confidence levels. [Tables 6](#) and [7](#) illustrate the cross tabulations between gender, age, and the impact of recent high profile attacks on decision making.

In recent times, the terrorist threat and attack landscape has evolved dramatically in western countries, seeing a steady rise in attacks motivated by international-related terrorism factors with a number of high impact, high profile, events, occurring in the United States (Orlando, 2016; San Bernardino, 2015; Boston, 2013). Nevertheless, the majority of major incidents in the United States continue to emerge from domestic origins and it

is, therefore, of no great surprise that 71% of respondents were more concerned with domestic threats than those emanating from international sources (29%). This poses many questions and challenges for current administrations tasked with responding to the terrorist threat level from a government perspective, particularly around aspects such as risk managers understanding of the current threat, how their understanding informed, how often this is reviewed, and why, as well as proportionality of response relative to both international-related terrorism and domestic, including home-grown terrorism, inspired by international terrorist organizations. Similarly to levels of concern, a Pearson Chi-squared value of 1.496 was achieved at one degrees of freedom and a  $p$  value of 0.05 for considerations of source of terrorism and gender, and a Chi-square value of 2.808 (at five degrees of freedom and  $p$  value of 0.05) for source of terrorism and age profile. These results highlight that they are not significant and that there is no difference between gender and age profile in relation to the assessment of terrorism source.

The current threat landscape highlights the emergence and significance of homegrown violent extremists (HVEs) inspired by foreign terrorist organizations and radicalized in the countries in which they are born, raised, or reside (State of New Jersey Office of Homeland Security & Preparedness, 2017). Recently, HVEs have demonstrated an ability to operate throughout the United States while connecting with like-minded individuals online and acting independently from organized terrorist groups. The increasing variety of radical groups such as the Islamic State of Iraq and Syria (ISIS) and Al Qaeda in the Arabian Peninsula (AQAP) have encouraged HVEs to attack in their home countries (State of New Jersey Office of Homeland Security & Preparedness, 2016). However, such attacks have themselves inspired, through reciprocal radicalization, home grown extreme right-wing terrorist attacks, which together with the increase in Islamist extremist attacks, resulted in John Carlin, Assistant Attorney General, establishing a new position within his Agency, solely dedicated to addressing “home-grown” terrorism.

The rise in the numbers of HVEs also shows no sign of abating with recent examples highlighting the need for risk managers to better understand the significance of HVEs. In July 2017, Aziz Sayyed, of Huntsville, Alabama, appeared in court charged with various terrorism-related offenses including his intention to cause explosions and extended terrorist attacks in the name of ISIS (Remkus, 2017). In the same month, Amer Alhaggagi, Oakland, California, was indicted on charges of providing material support and resources to ISIS (Sholli, 2017).

Risk managers were then asked where they thought the terrorist threat would most likely emerge from as this would significantly impact on their

mitigation frameworks going forward. Most were less concerned about a person using their site, or an existing employee, engaging in a terrorist attack on their business. In the context of the former, 18% of risk managers were most concerned about an employee, although the narrative provided suggests that this lack of concern was as a consequence of their site being secure, with limited customers/visitors. It was found that 13% of those surveyed were most concerned about a customer/genuine visitor of their site engaging in an act of terrorism. The perpetrator type that caused risk managers the most concern across the study sample was that of random individual(s)/lone actors (68%) with no connection to the site, which is unsurprising given that most attackers in recent events have had no identified connection with the target in which they attacked, particularly in the high profile attacks in Europe and the United States. Additionally, 1% of respondents were unsure of which perpetrator type caused them most concern.

The terrorist attack methodology, as mentioned previously, has evolved significantly in recent times, and it was important to appreciate what risk managers were most concerned about in relation to terrorist attack methods that could impact them. Results obtained, found that 49% of respondents ranked the risk of terrorist firearm attack as the most concerning action, with a terrorist vehicle attack being the second attack method of most concern (19%).

It is interesting to note that a review of vehicle ramming attacks in the West over the last 10 years shows increases in this tactic and resulting casualties, with 16 attacks in the west since 2007, including five at large outdoor public gatherings during celebrations and holidays, underscoring the need for greater risk management and mitigation measures at such events (NJOHSP, 2017). When one reflects on the respondents' concerns relative to this tactic and the fact that 71% fear more from homegrown terrorist, risk managers should be aware that this phenomenon is likely to continue. Indeed, this is supported by the fact that foreign terrorist organizations continue to promote such a tactic being used. Most notably in a recent edition of a, so-called, Islamic State magazine followers were encouraged to use vehicles in operations due to them being easy to acquire, create no warning signs due to their widespread use, and have the potential to cause significant fatalities (NJOHSP, 2017).

Risk managers were also concerned, albeit to a lesser degree, by the threat from a placed improvised explosive device (14%) with less concern about postal improvised explosive devices (9%) and person-borne improvised explosive devices (8%), despite the latter being a favored method of those motivated by international-related terrorism such as that used in the Manchester (United Kingdom) attack in 2017.

### ***Responsibilities and competencies of risk management***

Having established the current considerations of the threat landscape by risk managers in the study area, the research then sought to understand the competencies and methods used by the industry for understanding, countering, and mitigating terrorist actions. In relation to mitigating terrorism risk and loss exposure, it is important to understand whether risk managers actually believe that mitigating terrorism risk is an essential component of their job. Overwhelmingly, 81% of respondents believe that it is a core function, although, 38% did not believe that the risk management profession was fully prepared for evaluating terrorism risk. Indeed, only 3% felt that the profession was very prepared, with the majority (59%) feeling that the industry was only somewhat prepared to conduct such an evaluation suggesting that there were knowledge gaps that needed to be filled.

In the context of terrorism loss exposure, responses were achieved on what posed the most concern for risk managers with a definitive majority (75%) stipulating that loss of life was their primary consideration. Health and injury (68%) was identified as the second major concern for risk managers evidencing the view across the response that loss of life and injury are the predominant areas of concern in relation to loss exposure. Loss of property (52%) and general liability (66%) were identified as being the third and fourth issues of most concern in the context of loss exposure to risk managers with a common view that property can be replaced.

As a follow on from the previous question, respondents were asked what kind of private terrorism insurance coverage they thought was most appropriate for managing risk. There was limited consensus across those surveyed with 37% specifying that a specific terrorism policy or rider was most appropriate and 30% stipulating that terrorism coverage should be included within standard business policies. Some 6% of respondents believed that no terrorism coverage was required as they did not believe that the threat was a concern for them, with 26% stating that they did not know what coverage would be most appropriate for managing and mitigating the risk of terrorism for their organization.

The respondents were then asked, if they were familiar with the Terrorism Risk Insurance Act (TRIA) and the Terrorism Risk Insurance Programme Reauthorisation Act (TRIPRA)<sup>1</sup>, and if they thought that the TRIPRA provided adequate protection. A significant proportion of respondents, (66%) responded that they did not know whether adequate protection was provided through this program. 20% thought that TRIPRA did not provide adequate protection with only 14% thinking that it did provide adequate protection.

With regards considerations for policy pricing, respondents were asked if they thought that current security measures (such as hostile vehicle mitigation, CCTV, search and screen, stand-off distance and personal security) should be considered by insurance companies in their policy pricing. The majority of respondents (79%) agreed that these measures should be considered in policy pricing with 21% disagreeing.

Finally, respondents were asked if they thought that there would be substantive value in the development of a dedicated professional certification that recognized an organization's policies and procedures for mitigating terrorism risk from a personnel, business continuity, and physical protective security perspective. Some 68% of respondents believed that such an initiative should be developed with 32% suggesting that there was no merit in the development and implementation of a certification of this type.

### ***Managing and mitigating terrorism risk***

The management and mitigation of terrorism risk poses significant challenges for both operational and strategic decision making and policy support for all those tasked with countering terrorism. The highly complex and dynamic nature of the terrorist threat in recent times has exposed vulnerabilities, particularly in relation to private sector organizations and places managed within the private sector, which have been exploited by those planning and carrying out attacks. As a consequence, it is unsurprising that many risk managers surveyed believed that mitigating terrorism risk was now a core function of their profession. Despite this new emphasis in a risk manager's job description, many believed that the profession was still somewhat unprepared for evaluating terrorism risk as a consequence of the dynamism in attack methodologies, and their understanding of the current threat landscape. While some risk managers will have a knowledge and understanding of the threat environment, it is important to ensure that this is maintained and enhanced, as well as making sure that awareness and competency are raised with those that are not versed in the evaluation of terrorism risk, particularly in locations that would not be seen as traditional or iconic targets.

It is important to build on the results obtained through the empirical stages of this research in order to develop and present potential approaches for effectively and proactively managing and mitigating terrorism risk. While substantial research findings were achieved, the results identified four core themes which, if applied, could provide a platform for enhancing the current competencies and considerations of terrorism risk evaluation in the study area, and more importantly, have importance and applicability across the entire risk management profession globally.

First, there is a need to ensure that awareness of terrorist threat, particularly in locations that are not of major international significance, is raised, and that advice and guidance is provided across the entire business sector spectrum related to both domestic- and international-related terrorism. While this research acknowledges that the protective security advice given to risk managers in these locations should be proportionate to the threat, which may be low, it is fundamental that communication of threat, and advice and guidance on what to do in the event of a terrorist act is provided, on a routine basis. Indeed, this is furthered by the fact that the majority of respondents believed that they were only somewhat prepared, or not prepared at all, to evaluate terrorism risk. This suggests that those tasked with managing risk, including that posed by terrorism, require enhanced collaboration and communication from within their own organizations, or externally, from law enforcement, government, and other subject matter experts, on measures for the evaluation of terrorism risk. This could be achieved through the production and delivery of a current, emerging and residual threat local profile, which incorporates the international, national, and local threat profiles, which in turn, will allow those risk managers the opportunity to consider those threats from their perspective. They can identify, prioritize, choose to accept or devolve the risk, or indeed do nothing. However, such decisions will be recorded within the risk management plan based on what they knew and when they knew it and the likelihood of the threat manifesting itself within their sphere of responsibility. This protects the organization, serves to protect lives and property and has a clear prevention strategy in place which should assist in any future liability claim. This could be furthered by the creation of a strategic sector risk management group where current, emerging, and residual threats to the business sectors, can be considered by sector experts, affording them greater opportunities to identify, manage, and mitigate those risks.

The second consideration relates to security culture. The research results demonstrate that many risk managers do not believe the threat is likely to emerge from within their own organization or the assets/businesses that they manage, and this illustrates that additional training and guidance are required in the context of the threat landscape. In recent times, magazines aligned with terrorist groups have encouraged those inspired by international-related terrorism to infiltrate organizations in order to enable an attack to occur, as well as enhance the impact of an attack. It is, therefore, important that organizations, especially those within critical infrastructure and crowded places sectors, do not become complacent toward insider threat and adopt a security culture that effectively and nonobtrusively, manages personnel. Past research (BaMaung et al., 2018) provides a foundation from which the understanding, countering, and mitigation of



terrorist insider threat can be framed. Given the significant concern around random individuals/lone actors, protective security advice on the access and management of individuals coming on to sites must be a core component of any information exchange between risk managers and protective security advisors in order to enhance the feeling of safety and security of employees, visitors, and customers. This also holds true for people visiting the sites. While significant security on critical infrastructure sector sites will exist, and it is likely that these sites have corporate policies and procedures in place to manage security, it is fundamental that crowded places also adopt a mechanism for securing their sites, particularly during large events where visitors are not familiar with the site and where private security firms are responsible for the general safety of the event. Managing the threat from visitors, as well as from existing employees, and those contracted to secure the sites is fundamental, particularly given the challenges that exist with temporary event sites and public places. While risk managers believed that the threat was lower from customers and employees, the consideration of lone actors as the main threat type, evidences the need to ensure that risk managers are routinely advised, and trained, on methods for reducing the threat, risk, and harm posed by such attackers—particularly on aspects such as search and screen, evacuation planning, latest government advice, and other relevant considerations.

There has also been significant dynamism in the attack methodologies used by the perpetrators of terrorism in recent years and as a consequence, threat briefings, on a routine or frequent basis, should be a core facet of any model of information exchange that is developed and adopted to ensure that risk managers are mitigating loss exposure from the current threat, through the most appropriate protective security measures.

The third key component for managing and mitigating terrorism risk could be through initiatives that incentivize those that consider counter terrorism measures. One such example directly related to mitigating terrorism loss exposure has been the introduction of incentive based (re) insurance products that have focused on ensuring certain levels of maturity to terrorist threat through reductions in insurance premiums. While these have sought to encourage greater buy-in, the results found that ambiguity existed in relation to the most effective product from both a cost and mitigation perspective (and in relation to the businesses whose risk they are managing) suggesting that greater interaction with the insurance industry is required. This was also the case with the government backed TRIA and TRIPRA with results suggesting that most of those that responded, did not know whether adequate protection, in the context of the organizations and assets they manage, would be adequately protected under these initiatives.

One potential mechanism for alleviating these challenges could be derived from the United Kingdom example where specific assessment methodologies are being utilized to score existing protective security of crowded places and provide guidance on where future improvements could be made. Such measures could be developed in this context in the United States or on at least on a state-by-state basis. However, it is the view of the authors that these measures need to be mandated, either progressively, or as a consideration during the early stages of property development. It is not enough to have the security assessment carried out. Numerous examples exist where such assessments have been done, without the recommended remedial action being taken, resulting in exploitation of that vulnerability (World Economic Forum, 2016).

The final consideration which could be developed is that of a specific counter terrorism education program for risk managers with results demonstrating the need for a specific professional certification focused on mitigating terrorism risk. If such a professional certification was to be developed, it should focus on core elements such as security culture, insider threat/people security, risk assessment methodologies, and physical protective security. These, however, are not explicably related to mitigating terrorism risk and are fundamental considerations across all threats typologies and, therefore, would be essential for the risk management profession. As an incentive, this certification could align with insurance industry requirements and contribute toward credits for mitigating losses.

## Conclusions

Given that it may not be possible to mitigate the risk of terrorism completely, the risk management profession has a role to play in the whole-of-society approach to countering the threat, risk, and harm of terrorism. However, this research found that the knowledge and understanding of the terrorist threat landscape is one that is inconsistent across the risk management profession in the study area. Moreover, while terrorism has become a core consideration within loss exposure assessments, there is still a need to enhance, and in many cases develop, the competencies of risk managers for evaluating terrorism risk. This article, by seeking to understand the current considerations of the risk management profession, provides an analysis of these considerations, and established baseline recommendations for enhancing risk managers' competencies in this area. Although the findings are based on an American case study, they do have wider implications for cities worldwide, particularly those that are not considered primary tourist locations or those of international importance.

## Note

1. The Terrorism Risk Insurance Act (TRIA) was initially passed by Congress and signed into law on November 26, 2002. The Act introduced a temporary program that, in the event of major terrorist attack, both the insurance industry and federal government would share compensation for insured losses arising out of a terrorist attack. TRIA was renewed in 2005 for a further 2 years and then extended for another 7 years to 2014. Following its renewal in 2015 as the Terrorism Risk Insurance Program Reauthorization Act, coverage is now provided until 2020. For more details see <https://www.treasury.gov/resource-center/fin-mkts/Pages/program.aspx>

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